Attorney Docket No.: Q76325

AMENDMENT UNDER 37 C.F.R. § 1.116

Application No.: 10/618,963

REMARKS

This Amendment, filed in reply to the Office Action dated June 4, 2008, is believed to be fully responsive to each point of objection and rejection raised therein. Accordingly, favorable reconsideration on the merits is respectfully requested.

Claims 26, 29, 31-33, 35, 39 and 40 are rejected. Claims 30, 34 and 36-38 are objected to. Applicants note that although the Office Action Summary page indicates that only Claims 29-40 are pending, such appears to be a typographical error, as Claim 26 is pending, and rejected, in the Office Action. Claim 26 is amended herewith, support for which can be found throughout the specification, and at, for example, pages 12 and 13 of the specification as filed. Specifically, page 13, lines 17-19 discloses that the magnifying tag may be attached, or contain means for attachment to an adapter "which allows binding to the target sequence." Thus, the instant specification as filed clearly discloses embodiments wherein the magnifying tag is not part of the target polynucleotide. No new matter is added by way of this amendment. Entry and consideration of this amendment are respectfully requested.

Claim to Priority

Applicants thank the Examiner for acknowledging Applicants' claim to foreign priority, and receipt of the priority documents from the parent application, namely U.S. Application No. 09/8896,223.

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Claims 26, 29, 31-33, 35, 39 and 40 are Patentable Under 35 U.S.C. § 102

1. On page 3 of the Office Action, Claims 26, 29 and 40 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Medigue *et al.* (*Molecular Microbiology*, 1990, 4(2):169-187), for reasons of record.

In response to Applicants' previous traversal arguments, the Examiner contends that the bases within the sequenced fragment of Medigue *et al. necessarily* correspond to (i.e., they are associated with) the bases in the fragment being sequenced.

Applicants respectfully disagree, and traverse the rejection on the following grounds.

In making the rejection, the Examiner takes the position that the restriction sites in the fragment being sequenced by Medigue *et al.* "correspond to" the bases in the fragment being sequenced. Applicants note, however, that the restriction sites do not "correspond to" the bases in the fragment being sequenced, but rather, *are* the bases in the fragment being sequenced.

Nevertheless, in the interest of advancing prosecution, and without agreeing with the basis of the rejection, Applicants note that Claim 26 is amended herewith to recite that the magnifying tags "are not part of the native target nucleic acid molecule." In Medigue *et al.*, the restriction sites allegedly "corresponding to" the bases in the fragment being sequenced are the *actual* bases in the fragment being sequenced. Medigue *et al.* do not teach or even reasonably suggest the use of magnifying tags that are not part of the native target nucleic acid molecule, as presently claimed. Accordingly, Medigue *et al.* fail to teach each and every element of the claims, as is required to maintain a finding of anticipation.

Withdrawal of the rejection is respectfully requested.

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2. On page 3 of the Office Action, Claims 26, 29, 31-33, 35 and 39 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Shumaker *et al.* (*Human Mutation*, 1996, 7:346-354), for reasons of record.

In maintaining the rejection, the Examiner asserts that the positions indicated in Figure 3A may be considered positional markers.

Applicants respectfully disagree, and traverse the rejection on the following grounds.

Applicants note that Figure 3 of Shumaker *et al.* only depicts five oligonucleotides used to scan a five-nucleotide portion of a target polynucleotide for a mutation, in an arrayed primer-extension method. That is, Shumaker *et al.* only disclose the identification of the position of each nucleotide within a <u>fragment of a target molecule</u>. Shumaker *et al.* do not teach nor even reasonably suggest determining the position of the fragment within the parent target nucleic acid molecule, as is recited in step (b) of independent Claims 26 and 39. Accordingly, Shumaker *et al.* fail to teach each and every element of the claims, as is required to maintain a finding of anticipation.

Withdrawal of the rejection is respectfully requested.

Objections to the Claims

On page 3 of the Office Action, Claims 30, 34 and 36-38 are objected to as being dependent upon a rejected base claim. However, the Examiner indicates that these claims may be allowable if rewritten in independent form, including all of the limitations of the base claim and any intervening claims.

Applicants respectfully submit that these objections are overcome in view of the claim amendments and arguments presented herein.

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Withdrawal of the objection is respectfully requested.

Conclusion

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,

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